

Product datasheet for **TP721131**

Haptoglobin (HP) (NM_005143) Human Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Human haptoglobin (HP), transcript variant 1
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	Val19-Gln160(alpha chain)&Ile162-Asn406(beta chain)
Tag:	C-His
Predicted MW:	44.4 kDa
Concentration:	lot specific
Purity:	>95% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	Lyophilized from a 0.2 um filtered solution of PBS,PH7.4.
Endotoxin:	Endotoxin level is < 0.1 ng/μg of protein (< 1 EU/μg)
Reconstitution Method:	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. Dissolve the lyophilized protein in ddH ₂ O. It is not recommended to reconstitute a concentration less than 100 μg/ml. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.
Storage:	Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Stability:	Stable for at least 6 months from date of receipt under proper storage and handling conditions.
RefSeq:	<u>NP_005134</u>
Locus ID:	3240
UniProt ID:	<u>P00738</u>
RefSeq Size:	1433
Cytogenetics:	16q22.2
RefSeq ORF:	1218
Synonyms:	BP; HP2ALPHA2; HPA1S


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Summary:

This gene encodes a preproprotein, which is processed to yield both alpha and beta chains, which subsequently combine as a tetramer to produce haptoglobin. Haptoglobin functions to bind free plasma hemoglobin, which allows degradative enzymes to gain access to the hemoglobin, while at the same time preventing loss of iron through the kidneys and protecting the kidneys from damage by hemoglobin. Mutations in this gene and/or its regulatory regions cause ahaptoglobinemia or hypohaptoglobinemia. This gene has also been linked to diabetic nephropathy, the incidence of coronary artery disease in type 1 diabetes, Crohn's disease, inflammatory disease behavior, primary sclerosing cholangitis, susceptibility to idiopathic Parkinson's disease, and a reduced incidence of Plasmodium falciparum malaria. The protein encoded also exhibits antimicrobial activity against bacteria. A similar duplicated gene is located next to this gene on chromosome 16. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Oct 2014]

Protein Families:

Druggable Genome, Protease, Secreted Protein, Transmembrane